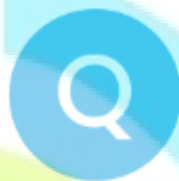




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QUIZZES

Practice Test-1 (Support & Movement)



10 Questions



7 min

Topics

Human Skeleton (Bone and Cartilage),
Disorder of Human Skeleton

SAEED MDCAT

Start Quiz

SAEED MDCAT TEAM



SAEEDMDCAT

06 : 58



Q

1/10



7 min



Hint

Q : Osteoblasts after conversion form:

A

Osteocytes

B

Osteoclasts

C

Stem cells

D

Chondrocytes

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7



Q

2/10



7 min



Hint

Q : It is the most abundant type of cartilage in human body:

A

Hyaline cartilage

B

Fibrocartilage

C

Elastic cartilage

D

Living cartilage

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

06 : 55



Q

3/10



7 min



Hint

Q : Epiglottis is:

A

Muscular

B

Cartilaginous

C

Fibrous

D

Bony

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7



Q

4/10



7 min



Hint

Q : The collagen fibers of bones are hardened by deposit of:

A

Calcium phosphate

B

Calcium nitrate

C

Calcium chloride

D

Calcium sulphate

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7



Q

5/10



7 min



Hint

Q : Bone and cartilage are types of:

A

Soft connective tissue

B

Special type of connective tissue

C

Rigid connective tissue

D

Rigid and soft connective tissue respectively

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT



6/10



7 min



Hint

Q : Bone matrix is hardened by:



Haversian canals



Canaliculi



Bone marrow tissue



Calcium phosphate

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT



Q

7/10



7 min



Hint

Q : Final structure of remodeled area resembles that of the original unbroken bone because it responds to the same set of _____ stimuli.

A

Chemical

B

Mechanical

C

Hormonal

D

Electrochemical

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT



8/10



7 min



Hint

Q : ____in legs are not symptom of sciatica.

A

Pain

B

Weakness

C

Joint degeneration

D

Numbness

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT



9/10



7 min



Hint

Q : Which of the following is a microbial infectious disease?

A

Tetany

B

Cramps

C

Rigor mortis

D

Tetanus

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

4

5

6

7

8

9

10



Q

10/10



7 min



Hint

Q : All of the following are related with muscle fatigue except:

A

Hypocalcaemia

B

Low ATP

C

High Lactic acid in muscle cells

D

Low pH in muscle fibers

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

4

5

6

7

8

9

10



Correct



Unattempted



Incorrect



1/10

Q : Osteoblasts after conversion form:



Osteocytes



Osteoclasts



Stem cells



Chondrocytes

Explanation

Osteoclasts are bone dissolving cells whereas chondrocytes are cartilage forming cells. Mature bone cells are formed from osteoblasts.



Correct



Unattempted



Incorrect



2/10

Q : It is the most abundant type of cartilage in human body:



Hyaline cartilage



Fibrocartilage



Elastic cartilage



Living cartilage

Explanation

Fibro- is found in vertebral discs, joint capsules, ligaments.

Elastic - is found in the external ear, epiglottis and larynx.



Correct



Unattempted



Incorrect



3/10

Q : Epiglottis is:



Muscular



Cartilaginous



Fibrous



Bony

Explanation

Epiglottis is elastic in nature and softer than bone.



Correct



Unattempted



Incorrect



4/10

Q : The collagen fibers of bones are hardened by deposit of:



Calcium phosphate



Calcium nitrate



Calcium chloride



Calcium sulphate

Explanation

Bones are reservoirs of minerals like calcium and phosphate.



Correct



Unattempted



Incorrect



5/10

Q : Bone and cartilage are types of:



Soft connective tissue



Special type of connective tissue



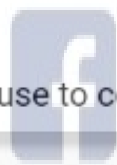
Rigid connective tissue



Rigid and soft connective tissue respectively

SAEED MDCAT

Explanation
SAEED MDCAT TEAM



SAEEDMDCAT

Tissues use to connect, support or bind other tissues or organs.



Correct



Unattempted



Incorrect



6/10

Q : Bone matrix is hardened by:



Haversian canals



Canaliculi



Bone marrow tissue



Calcium phosphate

Explanation

The collagen fibres of most rigid connective tissue of our body are hardened by deposit of calcium phosphate.



Correct



Unattempted



Incorrect



7/10

Q : Final structure of remodeled area resembles that of the original unbroken bone because it responds to the same set of _____ stimuli.



Chemical



Mechanical



Hormonal



Electrochemical

SAEED MDCAT TEAM

Explanation



SAEEDMDCAT

Remolded bones behave and respond to mechanical or physical stimuli just like original bone.



Correct



Unattempted



Incorrect



8/10

Q : ____in legs are not symptom of sciatica.



Pain



Weakness



Joint degeneration



Numbness

Explanation

Sciatica is a term that describes symptoms of pain, numbness, and/or weakness that radiate along the **sciatic** nerve from the lower back to the buttocks and leg.



Correct



Unattempted



Incorrect



9/10

Q : Which of the following is a microbial infectious disease?



Tetany



Cramps



Rigor mortis



Tetanus

Explanation

Tetanus is an infection caused by bacteria called *Clostridium tetani* and effects skeletal muscles badly.



Correct



Unattempted



Incorrect



10/10

Q : All of the following are related with muscle fatigue except:



Hypocalcaemia



Low ATP



High Lactic acid in muscle cells

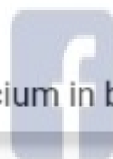


Low pH in muscle fibers

SAEED MDCAT

Explanation

SAEED MDCAT TEAM



SAEEDMDCAT

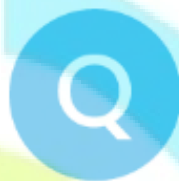
Low calcium in blood lead to tetany.



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QUIZZES

Practice Test-2 (Support & Movement)



10 Questions



7 min

Topics

Joints, Comparison of Muscles Types

Start Quiz

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

06 : 59



Q

1/10



7 min



Hint

Q : Hinge joints allow movements on:

A

Single plane

B

Two planes

C

Three planes

D

Four planes

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7



Q

2/10



7 min



Hint

Q : Sutures (Joints of skull) are examples of:

A

Immovable joints

B

Slightly moveable joints

C

Freely moveable joints

D

Synovial joints

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7



Q

3/10



7 min



Hint

Q : Symphysis pubis is actually a:

A

Joint

B

Sac like structure

C

Gland

D

Tube carrying genital material

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 56



Q

4/10



7 min



Hint

Q : Joint formed by distal end of femur is:

A

Ball and socket joint

B

Pivot joint

C

Hinge joint

D

Fibrous joint

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7



Q

5/10



7 min



Hint

Q : Speed of contraction is slow to rapid in case of:

A

Smooth muscles

B

Cardiac muscles

C

Skeletal muscles

D

All A, B, C

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7



Q

6/10



7 min



Hint

Q : Contraction of skeletal muscles is caused by:

A

Spontaneous

B

Stretch

C

Hormones

D

Nervous system

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7



7/10



7 min



Hint

Q : Type of muscles which have regular striations and voluntary control are:

A

Smooth muscles

B

Cardiac muscles

C

Skeletal muscles

D

All A, B, C

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7



Q

8/10



7 min



Hint

Q : These are visceral, non-striated and involuntary:

A

Smooth muscles

B

Cardiac muscles

C

Skeletal muscles

D

All A, B, C

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

4

5

6

7

8

9

10

06 : 48



Q

9/10



7 min



Hint

Q : Ball and socket joints have at least _____ groups of muscles.

A

1

B

2

C

3

D

4

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

4

5

6

7

8

9

10



Q

10/10



7 min



Hint

Q : The functional partner of bones is:

A

Tendons

B

Skeletal muscles

C

Ligaments

D

Fasciae

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

4

5

6

7

8

9

10



Correct



Unattempted



Incorrect



1/10

Q : Hinge joints allow movements on:



Single plane



Two planes



Three planes



Four planes

Explanation

It allows the movement up to 180° like between femur and tibia.



Correct



Unattempted



Incorrect



2/10

Q : Sutures (Joints of skull) are examples of:



Immovable joints



Slightly moveable joints



Freely moveable joints



Synovial joints

Explanation

These are least moveable joints.



Correct



Unattempted



Incorrect



3/10

Q : Symphysis pubis is actually a:



Joint



Sac like structure



Gland

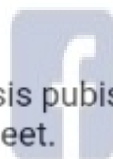


Tube carrying genital material

SAEED MDCAT

Explanation

SAEED MDCAT TEAM



SAEEDMDCAT

Symphysis pubis is formed in front of pelvic region where two pubic bones meet.



Correct



Unattempted



Incorrect



4/10

Q : Joint formed by distal end of femur is:



Ball and socket joint



Pivot joint



Hinge joint



Fibrous joint

Explanation

Tibia forms joint with femur, that allows 180-degree movement.



Correct



Unattempted



Incorrect



5/10

Q : Speed of contraction is slow to rapid in case of:



Smooth muscles



Cardiac muscles



Skeletal muscles



All A, B, C

Explanation

Muscles without rhythmicity and in our control.



Correct



Unattempted



Incorrect



6/10

Q : Contraction of skeletal muscles is caused by:



Spontaneous



Stretch



Hormones



Nervous system

Explanation

Smooth muscles are controlled by hormones as well as nervous stimulation and so is cardiac.



Correct



Unattempted



Incorrect



7/10

Q : Type of muscles which have regular striations and voluntary control are:



Smooth muscles



Cardiac muscles



Skeletal muscles



All A, B, C

SAEED MDCAT TEAM

Explanation



SAEEDMDCAT

Voluntarily controlled muscles having regular striations are also multinucleated and unbranched.



Correct



Unattempted



Incorrect



8/10

Q : These are visceral, non-striated and involuntary:



Smooth muscles



Cardiac muscles



Skeletal muscles



All A, B, C

Explanation

Skeletal and Cardiac muscles are striated while only skeletal muscles are voluntary muscles.



Correct



Unattempted



Incorrect



9/10

Q : Ball and socket joints have at least _____ groups of muscles.



1



2



3



4

Explanation

In order to provide maximum degree movement at least 2 pairs of muscles should attach.



Correct



Unattempted



Incorrect



10/10

Q : The functional partner of bones is:



Tendon



Skeletal muscles



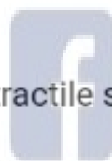
Ligaments



Fasciae

Explanation

The contractile structures under the control of somatic nervous system.



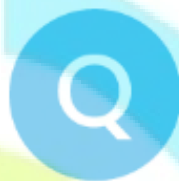
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QUIZZES

Practice Test-3 (Support & Movement)



10 Questions



7 min

Topics

Structure and Ultra-structure of Skeletal Muscles, Sliding Filament Model and Energy for Muscle Contraction

SAEED MDCAT

Start Quiz

SAEED MDCAT TEAM



SAEEDMDCAT



Q

1/10



7 min



Hint

Q : Generally, each end of the entire muscle is attached to bone by a bundle of collagen, non-elastic fibers known as:

A

Cartilage

B

Ligament

C

Tendon

D

Periosteum

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT



Q

2/10



7 min



Hint

Q : Sarcoplasm of skeletal muscle fiber is different from cytoplasm of other cells because of all of the following except:

A

Stored glycogen

B

Myoglobin

C

Location of nuclei

D

RER

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

06 : 57



Q

3/10



7 min



Hint

Q : It is non-polarizing to light:

A

A band

B

H zone

C

I band

D

All A, B, C

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 56



Q

4/10



7 min



Hint

Q : It is a dense connective tissue that surrounds entire muscle:

A

Tendon

B

Ligament

C

Epimysium

D

Perimysium

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 55



Q

5/10



7 min



Hint

Q : Sarcoplasmic reticulum does not contain:

A

Cisternae

B

Tubules

C

Ribosomes

D

Ca²⁺-gates

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7

06 : 54



Q

6/10



7 min



Hint

Q : In cardiac muscles, T-tubules extend and encircle the myofibrils at:

A

A-band

B

A-I Junction

C

Z-line

D

M-line

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT

1

2

3

4

5

6

7



Q

7/10



7 min



Hint

Q :

At the start of a muscle contraction, calcium ions are released from:

A

Actin

B

Motor neuron

C

T tubule

D

Sarcoplasmic reticulum

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT



8/10



7 min



Hint

Q : When more energy is required for muscle contraction, it is provided by an energy storing substance called:

A

Glucose

B

ATP

C

Lactic acid

D

Creatine phosphate

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT



9/10



7 min



Hint

Q : It is an energy storing protein in skeletal muscles:

A

Myoglobin

B

Creatine phosphate

C

ATP

D

Glycogen

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT



Q

10/10



7 min



Hint

Q : Part of muscle that is able to contract is:

A

Origin

B

Insertion

C

Tendon

D

Belly

SAEED MDCAT

SAEED MDCAT TEAM



SAEEDMDCAT



Correct



Unattempted



Incorrect



1/10

Q : Generally, each end of the entire muscle is attached to bone by a bundle of collagen, non-elastic fibers known as:



Cartilage



Ligament



Tendon



Periosteum

SAEED MDCAT TEAM

Explanation



SAEEDMDCAT

Fibrous structure encapsulates a fluid to provide cushion or protection whereas ligaments are meant for the attachment of bone with bone.



Correct



Unattempted



Incorrect



2/10

Q : Sarcoplasm of skeletal muscle fiber is different from cytoplasm of other cells because of all of the following except:



Stored glycogen



Myoglobin



Location of nuclei



RER

SAEED MDCAT TEAM

Explanation



SAEEDMDCAT

Basic organelles are same but position of nucleus is peripheral.



Correct



Unattempted



Incorrect



3/10

Q : It is non-polarizing to light:



A band



H zone



I band



All A, B, C

Explanation

A-band is anisotropic in polarized light.



Correct



Unattempted



Incorrect



4/10

Q : It is a dense connective tissue that surrounds entire muscle:



Tendon



Ligament



Epimysium



Perimysium

Explanation

Perimysium envelopes muscle bundles.



Correct



Unattempted



Incorrect



5/10

Q : Sarcoplasmic reticulum does not contain:



Cisternae



Tubules



Ribosomes



Ca²⁺-gates

Explanation

Sarcoplasmic reticulum is of smooth type of reticulum.



Correct



Unattempted



Incorrect



6/10

Q : In cardiac muscles, T-tubules extend and encircle the myofibrils at:



A-band



A-I Junction



Z-line



M-line

Explanation

Thousands of T-tubules of each muscle cell are collectively called T-system. It extends and encircles the myofibrils at the level of Z-line or A-I junction.



Correct



Unattempted



Incorrect



7/10

Q:

At the start of a muscle contraction, calcium ions are released from:



Actin



Motor neuron



T tubule



Sarcoplasmic reticulum

SAEED MDCAT TEAM

Explanation



SAEEDMDCAT

Sarcoplasmic reticulum upon stimulation releases calcium ions into cytosol which then binds with Troponin.



Correct



Unattempted



Incorrect



8/10

Q : When more energy is required for muscle contraction, it is provided by an energy storing substance called:



Glucose



ATP



Lactic acid



Creatine phosphate

SAEED MDCAT TEAM

Explanation



SAEEDMDCAT

Lactic acid can be a source of energy but cannot supply energy rapidly on demand.



Correct



Unattempted



Incorrect



9/10

Q : It is an energy storing protein in skeletal muscles:



Myoglobin



Creatine phosphate



ATP



Glycogen

SAEED MDCAT

Explanation

SAEED MDCAT TEAM

ATP is not a protein.



SAEEDMDCAT



Correct



Unattempted



Incorrect



10/10

Q : Part of muscle that is able to contract is:



Origin



Insertion



Tendon



Belly

Explanation

Origin and insertion are to hold muscles with bones.